

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions and listings of claims in the above-identified application.

Listing of Claims:

1. (Currently Amended) A digital copying machine comprising:
an image reader that reads an image of an original document and generates scan image data,
a printing unit that prints based on print image data,
a controller through which the scan image data and the print image data are exchanged with an external computer,
[[a]] an internal bus that transmits the scan image data generated by the image reader to an external computer the controller and that transmits the print image data from the controller external computer to the printing unit,
a signal generator that generates a signal based on an operation timing of the printing unit, and
a switch switching means that, in response to the signal, switches the internal bus between transmission from the image reader to the controller external computer and transmission from the external computer controller to the printing unit.
2. (Original) A digital copying machine as claimed in claim 1, said signal generated by the signal generator is a clock signal issued based on an operation timing for each pixel.

3. (Original) A digital copying machine as claimed in claim 1, said signal generated by the signal generator is a horizontal synchronization signal issued based on an operation timing for each line.

4. (Currently Amended) A digital copying machine as claimed in claim 1, said internal bus includes a read buffer that temporarily stores the scan image data read by the image reader.

5. (Currently Amended) A digital copying machine as claimed in claim 1, said internal bus includes a print buffer that temporarily stores the print image data sent by the external computer.

6. (Currently Amended) A digital copying machine comprising:
an image reader that reads an image of an original document and generates scan image data,
a printing unit that prints based on print image data,
a controller through which the scan image data and the print image data are exchanged with an external computer,

[[a]] an internal bus that transmits the scan image data generated by the image reader to the controller ~~an external computer~~ and that transmits the print image data from the ~~external computer~~ controller to the printing unit,
a read buffer that temporarily stores the scan image data read by the image reader,

a print buffer that temporarily stores the print image data sent by the external computer,

a signal generator that generates horizontal synchronization signals issued based on an operation timing for each line in the printing unit, and

~~switching means~~ a switch that, in response to a rise and a fall of the horizontal synchronization signals, switches the internal bus between transmission from the image reader to the ~~external computer~~ controller and transmission from the ~~external computer controller~~ to the printing unit, whereas scan image data for one line taken out of the read buffer and print image data for one line taken out of the print buffer are alternately transferred via the bus.

7. (Currently Amended) An image data transfer method which is performed in a digital copying machine having an image reader that reads an image of an original document and generates scan image data, a printing unit that prints based on print image data, a controller through which the scan image data and the print image data are exchanged with an external computer, and [[a]] an internal bus that transmits the scan image data generated by the image reader to the controller ~~an external computer~~ and that transmits image data from the controller ~~external computer~~ to the printing unit, said method comprising the steps of:

generating a signal based on an operation timing of the printing unit, and

switching, in response to the signal, the internal bus between transmission from the image reader to the controller ~~external computer~~ and transmission from the ~~external computer~~ controller to the printing unit.

8. (Original) An image data transfer method as claimed in claim 7, said signal generated by the signal generator is a clock signal issued based on an operation timing for each pixel.

9. (Original) An image data transfer method as claimed in claim 7, said signal generated by the signal generator is a horizontal synchronization signal issued based on an operation timing for each line.

10. (Currently Amended) An image data transfer method as claimed in claim 7, wherein said internal bus includes a read buffer that temporarily stores the scan image data read by the image reader.

11. (Currently Amended) An image data transfer method as claimed in claim 7, wherein said bus includes a print buffer that temporarily stores the print image data sent by the controller ~~external computer~~.

12. (Currently Amended) A controller for controlling transmissions of image data ~~between~~ within a digital copying machine and for exchanging the image data with an external computer, the controller comprising:

[[a]] an internal bus that transmits scan image data generated by an image reader of the digital copying machine to the controller ~~the external computer~~ and that transmits print image data from the controller ~~external computer~~ to a printing unit of the digital copying machine, and

a switch switching means that, in response to a signal that is generated based on an operation timing of the printing unit, switches the internal bus between transmission from the image reader to the controller ~~external computer~~ and transmission from the controller ~~external computer~~ to the printing unit.

13. (Previously Presented) A controller as claimed in claim 12, said signal is a clock signal issued based on an operation timing for each pixel.

14. (Previously Presented) A controller as claimed in claim 12, said signal is a horizontal synchronization signal issued based on an operation timing for each line.

15. (Currently Amended) A controller as claimed in claim 12, said bus includes a read buffer that temporarily stores the scan image data read by the image reader.

16. (Currently Amended) A controller as claimed in claim 12, said bus includes a print buffer that temporarily stores the print image data sent by the controller ~~external computer~~.

17. (Currently Amended) The digital copying machine of claim 1, wherein the switch switching means switches the bus between transmission from the image reader to the ~~external computer~~ controller and transmission from the controller

~~external computer~~ to the printing unit and back again repeatedly and at predetermined fixed intervals.

18. (Currently Amended) The digital copying machine of Claim 6, wherein the switch ~~switching means~~ switches the bus between transmission from the image reader to the controller ~~external computer~~ and transmission from the controller ~~external computer~~ to the printing unit and back repeatedly and at predetermined fixed intervals.

19. (Currently Amended) The method of claim 7, comprising switching the bus between transmission from the image reader to the controller ~~external computer~~ and transmission from the controller ~~external computer~~ to the printing unit and back again repeatedly and at predetermined fixed intervals.

20. (Currently Amended) The controller of claim 12, wherein the switch ~~switching means~~ switches the internal bus between transmission from the image reader to the controller ~~external computer~~ and transmission from the controller ~~external computer~~ to the printing unit and back again repeatedly and at predetermined fixed intervals.